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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Application Number: 10/650,487
Filing Date: August 27, 2003
Appellant(s): OLIVER ET AL.

Tam Thanh Pham
Registration Number: 50,565
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 4/3/2008 appealing from the Office action

mailed 8/17/2007.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial

proceedings which will directly affect or be directly affected by or have a bearing on the

Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection

contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is

correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

2005/0015626	Chasin	1-2005
2003/0204569	Andrews et al.	10-2003

2002/0199095   Bandini   12-2002

6,161,130   Horvitz et al.   12-2000

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-2, 5-12, 14-19, 28 and 30 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Chasin (2005/0015626) in view of Andrews et al. (2003/0204569).

a)   As to claims 1, 28 and 30, Chasin discloses a method for improving a

statistical message classifier, comprising: testing a message with a machine classifier,

wherein the machine classifier is capable of making a classification on the message

(see Chasin: 0032) and the machine classifier is a reliable classifier having a probability

of erroneous classification of less than one percent (i.e. confidence ratio used for

classifying a message as spam or junk can be increased to a relatively high value, e.g.

approaching 100 percent, see Chasin: 0011); the statistical message classifier is

configured to detect an unsolicited message (see Chasin: 0032-0033) and comprises a

knowledge base that tracks the spam probability of features in classified message (i.e.

statistical classifiers determine and access the probability that a new e-mail message

with identified tokens is spam or not spam, see Chasin: 0037, 0045, 0049). However

Chasin is silent on the capability of having in the event the machine classifier makes the

classification, updating the statistical message classifier according to the classification

made by the machine classifier.

Andrews is relied on for the teaching of having in the event the machine classifier

makes the classification, updating the statistical message classifier according to the

classification made by the machine classifier (i.e. statistical message classifier uses

characteristic keywords and/or words associations to detect spam e-mails and these

information are saved in a special folder to be used as a training database to update

statistical classifier, see Andrews: 0040, 0048-0049 and 0069).

It would have been obvious to one of ordinary skill in the art at the time of the

invention to employ the use of in the event the machine classifier makes the

classification, updating the statistical message classifier according to the classification

made by the machine classifier in the system of Chasin, as Andrews discloses, so as to

update the statistical classifiers for improving classifying and identifying spam (see

Chasin: 0034).

b)   As to claim 2, the combination of Chasin and Andrew discloses the

method for improving a message classifier as recited in claim 1, wherein the machine

classifier is further capable of making no classification on the message (i.e. to allow

unfiltered e-mails to pass to the e-mail server for later delivery to or picking up by the e-

mail recipient, see Chasin: 0031)

c)   As to claim 5, the combination of Chasin and Andrew discloses the method for improving a message classifier as recited in claim 1, wherein the machine classifier includes a whitelist classifier (see Chasin: 0035).

d)   As to claim 6, the combination of Chasin and Andrew discloses the method for improving a message classifier as recited in claim 1, wherein the machine classifier includes a collaborative fingerprinting classifier (see Chasin: 0037).

e)   As to claim 7, the combination of Chasin and Andrew discloses the method for improving a message classifier as recited in claim 1, wherein the machine classifier includes an image analyzer (see Chasin: 0047).

f)   As to claim 8, the combination of Chasin and Andrew discloses the method for improving a message classifier as recited in claim 1, wherein the machine classifier includes a probe account (i.e. honeypots uses dummy email addresses or fake recipients to attract spam, see Chasin: 0037).

g)   As to claim 9, the combination of Chasin and Andrew discloses the method for improving a message classifier as recited in claim 1, wherein the machine classifier includes a challenge-response classifier (see Chasin: 0037).

h)   As to claim 10, the combination of Chasin and Andrew discloses the method for improving a message classifier as recited in claim 1, wherein updating the statistical message classifier comprises updating a knowledge base used to train the statistical message classifier (see Andrews: 0049).

i)   As to claim 11, the combination of Chasin and Andrew discloses the method for improving a message classifier as recited in claim 1, wherein updating the

statistical message classifier comprises updating a statistical model used by the

statistical message classifier (see Andrews: 0048-0049).

jl)   As to claim 12, the combination of Chasin and Andrew discloses the

method for improving a message classifier as recited in claim 1, wherein updating the

statistical message classifier comprises parsing the message to obtain a feature (see

Chasin: 0037).

k)   As to claim 14, the combination of Chasin and Andrew discloses the

method for improving a message classifier as recited in claim 1, wherein updating the

statistical message classifier comprises parsing the message to obtain a feature and

updating a training set (see Andrew: 0049).

l)   As to claim 15, the combination of Chasin and Andrew discloses the

method for improving a message classifier as recited in claim 1, wherein updating the

statistical message classifier comprises parsing the message to obtain a feature and

computing a spam probability associated with the feature (see Chasin: 0037, 0049).

m)   As to claim 16, the combination of Chasin and Andrew discloses the

method for improving a message classifier as recited in claim 1, wherein updating the

statistical message classifier comprises parsing the message to obtain a feature and

computing a score associated with the feature (see Chasin: 0036).

n)   As to claim 17, the combination of Chasin and Andrew discloses the

method for improving a message classifier as recited in claim 1, wherein the message is

a previously stored message (i.e. e-mails released from quarantine, see Chasin: 0031).

o)   As to claim 18, the combination of Chasin and Andrew discloses the

method for improving a message classifier as recited in claim 1, wherein the message is

an incoming message (see Chasin: 0031).

p)   As to claim 19, the combination of Chasin and Andrew discloses the

method for improving message classifier as recited in claim 1, in the event that the

message is not classifiable by the classifier, further comprising testing the message with

another machine classifier (i.e. filtered messages may be refused by the filter modules,

and other classifiers may be used as additional filters for identifying the messages, see

Chasin: 0032-0033).

Claims 13, 20, 22-26, 29 and 31 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Chasin (2005/0015626) in view of Andrews et al. (2003/0204569)

and further in view of Bandini (2002/0199095).

a)   As to claims 20, 23-24, 29 and 31, the majority of claim limitations in these

claims are in claim 1 and addressed by Chasin and Andrews, however the combination

of Chasin and Andrews is silent on the capability of having in the event that the

message is not classifiable by the first classifier, testing the message with a second

classifier, wherein the second classifier is capable of making a second classification.

Bandini is relied on for the teaching of having in the event that the message is not

classifiable by the first classifier, testing the message with a second classifier, wherein

the second classifier is capable of making a second classification (i.e. the e-mail relay is

used to filter email, email with score below the borderline level is a clean indication,

those are not classified in the clean category are further tested for spam indication or

other indication, see Bandini: 0019, 0021); in the event that the message is classifiable

by the second classifier, updating the statistical message classifier according to the

second classification (the combination of Chasin and Andrew discloses updating the

statistical message classifier according to the first classification, see addressed above

claim 1, this same concept can be implemented to update the statistical message

classifier according to the second classification). It would have been obvious to one of

ordinary skill in the art at the time of the invention to employ the use of in the event that

the message is not classifiable by the first classifier, testing the message with a second

classifier, wherein the second classifier is capable of making a second classification in

the system of Chasin and Andrews, as Bandini teaches, so as to reduces the number of

SPAM messages users receive (see Bandini: 0003).

        b)   As to claim 13, the combination of Chasin, Andrews and Bandini discloses

the method for improving a message classifier as recited in claim 1, wherein updating

the statistical message classifier comprises parsing the message to obtain a feature and

updating a counter corresponding to the feature (see Bandini: 0039).

        c)   As to claims 22 and 25-26, the combination of Chasin, Andrew and

Bandini discloses the method for improving message classifier as recited in claim 20,

wherein the second classifier is a reliable, reliable good classifier, reliable junk classifier

having a probability of erroneous classification of less than one percent (i.e. confidence

ratio used for classifying a message as spam or junk can be increased to a relatively

high value, e.g. approaching 100 percent, see Chasin: paragraph 0011).

Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chasin

(2005/0015626) in view of Andrews et al. (2003/0204569) in view of Bandini et al.

(2002/0199095) and further in view of Horvitz et al. (6,161,130).

The combination of Chasin, Andrews and Bandini discloses the method of claim

20, however it is silent on the capability of having the first classifier is a user-augmented

classifier. Horvitz is relied on for the teaching of the first classifier is a user-augmented

(Horvitz: col. 9, lines 9-17). It would have been obvious to one of ordinary skill in the art

at the time of the invention to employ the use of the first classifier is a user-augmented

in the system of Chasin, Andrews and Bandini, as Horvitz teaches, so as to allow user

making ultimate decision.

(10) Response to Argument

**a)   Appellant, on pages 18-19 of the brief, submits that independent
claims 1, 20, 23-24 and 28-31 recite a "classifier" having or capable of having an
erroneous classification probability of "less than one percent". Appellant argues
that Chasin does not anticipate an erroneous classification probability of "less
than one percent" with sufficient specificity.**

Chasin's system is designed to accurately identify and filter unwanted email

messages or spam for the purpose of creating no false positives.

According to Chasin, the confidence ratio used for classifying a message as

spam or junk can be increased to a relatively high value, e.g. approaching 100 percent

(Chasin: 0011). Chasin discloses confidence ratio that is designed to produce no false

positives, as such it results in zero percent erroneous classification probability (Chasin:0007).

b)   Appellant, on page 20 of the brief, argues that the element "erroneous classification probability of less than one percent" is missing in Chasin and is necessarily present in Chasin.

It is acknowledged that Chasin does not explicitly disclose the erroneous classification probability of less than one percent. However, Chasin discloses the confidence ratio used for classifying a message as spam or junk can be increased to a relatively high value, e.g. approaching 100 percent (Chasin: 0011). As addressed above Chasin's system is designed to yield no false positives, with the approaching 100 percent confidence ratio, which implies zero percent erroneous classification probability,

c)   Appellant, on page 21 of the brief, argues that a motivational statement is required as to any purported obviousness of an erroneous classification probability of less than one percent with respect to Chasin.

It would have been obvious to one of ordinary skill in the art at the time of the invention to employ the confidence ratio, used for classifying a message as spam or junk, of approaching 100 percent in the system of Chasin, so as to accurately identifying and filtering unwanted junk e-mail messages or spam that also creates **no** or few false positives (Chasin: 0007).

d)   Appellant, on page 22 of the brief, argues that Chasin is not enabled with respect to an erroneous classification probability of "less than one percent".

As Chasin indicates some spam classification techniques can inaccurately identify messages as junk or spam, i.e. to issue false positives, as this can result in important or wanted messages being blocked and lost or quarantined and delayed creating other issues for the sender and receiver of the messages. Therefore, Chasin discloses a need for accurately identifying and filtering unwanted junk email messages or spam that also creates **no** false positives (i.e. 100 percent confidence ratio or zero percent erroneous classification probability) (Chasin: 0007). Chasin states that by applying filters in addition to the contact or link processor to the e-mail message, the confidence ratio used for classifying a message as spam or junk can be increased to a relatively high value, e.g., approaching 100 percent (Chasin: 0011). Chasin's disclosures are in accordance with overcoming the deficiencies of existing spam filters and classification engines as set out (Chasin: 0009). As such, Chasin is enabled with respect to an erroneous classification probability of "less than one percent".

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

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